

A Comprehensive Review of Indirect Approaches for Consumer Based Brand Equity Measurement

AADIL WANI¹

Research Scholar

The Business School, University of Kashmir

Abstract:

The concept of brand equity first started in 1980s. Since then it has evolved into many concepts broadly defined into consumer based brand equity and firm based brand equity. While the firm based brand equity focuses on monetary value of brand from business perspective, consumer based brand equity focuses on consumer's perception about the brand. Consumers assign levels of equity to brands when they favour one over the other. From the consumers' point of view, brand equity is part of their attraction to or repulsion from a product. This perspective allows marketing managers to use an effective strategy in understanding and influencing consumer attitudes and behaviours. Consumer-based brand equity (CBBE) focuses on understanding consumers' state of mind in brand selections and identifying the sources of brand values. As branding has been critical for success of the business, it has become important to evaluate the contribution of brand equity in the overall business. The researchers have suggested direct and indirect measures to measure the brand equity. For practitioners the indirect approaches are more critical as it focuses on drivers and potential sources of brand equity. In this study we review the approaches for indirect measures of consumer based brand equity.

¹ AADIL WANI is currently enrolled in University of Kashmir as a research scholar. He has worked as a junior research fellow for a national research project run by Government of India at The Business School, University of Kashmir, title of project being 'Brand Building Measures for Agricultural Products: A Branding Model for Saffron'. As of now the author has two publications in international journals. The areas of research are brand management, retail marketing, rural marketing and agribusiness sustainability.

An intense survey of literature is done to fill the missing link in the indirect measures of brand equity. The implication of the study is that it will pave out a clear picture for conceptualizing the approaches for indirect brand equity measures.

Key words: Brand Equity, Consumer Based Brand Equity, Indirect Approach Brand Evaluation

INTRODUCTION

Brand equity

Some brands have been able to carve out a space for themselves in the consumers' hearts over the centuries and still stand out among floods of others. Researchers have been able to show that the brand equity of a product affects consumer preferences and purchase intention (Cobb-Walgren *et al.* 1995), market share (Agarwal & Rao 1996), long-term cash flows and future profits (Srivastava & Shocker 1991), consumer perceptions of product quality (Dodds *et al.* 1991), stock prices (Simon & Sullivan 1993), mergers and acquisitions (Mahajan *et al.* 1994), creates sustainable competitive advantage (Bharadwaj *et al.* 1993) and resilience to product-harm crisis (Dawar & Pilltula 2000). Brands with high brand equity enjoy high consumer preference, purchase intention, purchase, loyalty, and even higher stock returns (Cobb-Walgren *et al.* 1995, Aaker & Jacobson 1994). Almost every single marketing activity works to create, manage and exploit brand equity. Also from a consumers point of view, a brand with high equity increases the credibility of the information provided for/with the product, reduces the perceived risk, reduces the consumers need to think and overall enhances the consumers utility from the product/brand (Erdem & Swait 1998).

And no doubt, almost all marketing activities are geared to increase the brand equity by working to create, manage and exploit brand equity. A brand with high equity is for a customer

beneficial too as a high equity for a particular brand makes it credible among the customers and the information provided by it through advertisement is also taken as reliable. It also reduces the perceived risk, reduces the consumers need to think and overall enhances the consumers utility from the product/brand (Erdem & Swait 1998).

There was a search for all-encompassing definition for brand equity by the academicians till 1990's which resulted in myriad of definitions. All these efforts to define the term were essentially conceptual in nature which was to undergo a change in the coming time. A consensus was arrived at in 1993, providing for two broad definitions for brand equity. One being the: financial aspect (also known as firm based brand equity) and the other as: consumer behavior based brand equity (also known as Customer based brand equity). Feldwick (1996) states that the term brand equity means different things to different people (consumers), channel-partners and companies. He identified three types of brand equity:

- 1) Financial value of a brand which is the total value a brand provides as a separable asset and is used for the purposes of accounting (and financial reporting) and to buy or sell the brand;
- 2) The attachment that a consumer has to a brand (something akin to brand attachment and leading to brand loyalty). This is termed as brand strength.
- 3) The set of associations and beliefs that the consumer has for the brand (referred to as brand image by Keller (1993) but termed brand description by Feldwick (1996)).

Brand value (total financial value) is a conceptualization of brand equity held by accountants whilst the other two conceptualizations (brand strength and description) are those of marketers. These two are measures of consumer based brand equity.

Firm Based Brand Equity (FBBE) - the financial value that created by the brand for the organization. FBBE is that part of the concept of brand equity which benefits the company in the shape of increased market share, the premium that the brand earns (over unbranded alternatives), the ability of the brand to sustain competition, imitation, and endure crisis. In monetary terms its quantification involves the brand valuation forming the basis of deciding the price for buying & selling of brands and for reporting brand values in financial reporting. In most of the FBBE definitions, stress is given to the financial value of the brand of the firm (Shocker & Weitz 1988, Mahajan *et al.* 1994, Simon & Sullivan 1993). FBBE is defined as the incremental cash flows that accrue to a brand over an unbranded version of the same offering (Simon and Sullivan 1993). Srinivasan *et al.* (2001) define FBBE “as the incremental profit per time period obtained by the brand in comparison to a brand with the same product and price but with minimal brand-building efforts”. It boils down to the comparison of the financial value that ensues from a product having its brand name to the financial value that would accrue if the same product did not carry that brand name. Brand valuation methods therefore aim at reporting the quantified FBBE and various proprietary methods such as Inter-brand, Future brand, Brand rating, Millward Brown are used for the same purpose. Firms, to remember, are not the only recipients of brand value, the main recipients of brand value are its consumers.

Consumer Based Brand Equity (CBBE) – the form of equity that the brand has with its consumers (it includes the awareness consumers have of the brand, the perceived quality premium they attach to the brand, the variety of associations they have for the brand in their minds, their emotional connect, the loyalty they have for the brand and variety of other such measures) is called Consumer Based Brand Equity (CBBE).

CBBE is defined as the differential effect of brand knowledge on the consumer's response to the marketing mix of the brand (Keller 1993). Several researchers have conceptualized CBBE similar to Keller (Aaker 1991, Kamakura & Russell 1993, Cobb-Walgren *et al.* 1995, Sinha & Pappu 1998, Yoo & Donthu 2001, Washburn & Plank 2002).Mackay *et al.* (1997) who stated that CBBE refers to "the added value of the brand to the consumer". Consumer-based brand equity refers to consumers' feelings of a particular product to associations that are not necessarily related to specific product attributes, that is, associations that exist independent of the product itself (Keller and Lehmann, 2006). The customer level measurement, basis its perception of brand value originating entirely from the consumers (what they buy, how they buy, why they buy, etc.). Therefore, consumers assign levels of equity to brands when they favour one over the other. From the consumers' point of view, brand equity is part of their attraction to or repulsion from a product (Keller and Lehmann, 2006). This perspective allows marketing managers to use an effective strategy in understanding and influencing consumer attitudes and behaviours. Consumer-based brand equity (CBBE) focuses on understanding consumers' state of mind in brand selections and identifying the sources of brand values (Baker *et al.*, 2005; Lassar *et al.*, 1995; Yoo and Donthu, 2001). According to Keller (1993) and Srivastava and Shocker (1991), CBBE can be measured directly or indirectly. The direct approach involves looking at brand equity as the value that a brand adds to a product and uses consumers' responses to understand the effects of branding activities. The indirect approach is based on Keller's (1993) view of identifying the antecedents of brand equity that exist in consumers' minds and influence their purchase decisions.

LITERATURE REVIEW

Brand Equity Measurement has been identified as a very vital part of marketing research by Marketing Science Institute. The reasons MSI gave for importance of measuring Brand Equity were put forth in a workshop at MSI (1999). The main reasons suggested was to guide marketing decisions in both long term & short term. The other reasons included the evaluation of extendibility of a brand, to measure the performance of marketing decisions in the long term so as to focus not just on profit but to maximize the wealth of firm. The other reasons for measuring Brand Equity was for evaluating the worth of a brand independently so as it can be traded in the market as an independent entity.

The conceptualization of the Brand Equity was done by many authors such as Leuthesser in 1988, Fanquhar in 1989, Aaker in 1991 & 1996 & Keller in 1993. However different approaches to measure Brand Equity started emerging in mid of 1990s. A number of different approaches for measuring Brand Equity were suggested so as to derive the brand value. These approaches include a scanner data based measure (Kamakura & Russell, 1993), conjoint analysis (Rangaswamy *et al.*, 1993), a composite multi attribute measure based on survey (Park & Srinivasan, 1994), a measure based on consumer behavior (Agarwall and Rao, 1996), increased cash flows occurred to the brand (Simmon & Sullivan, 1993), the price equalization (Swait *et al.*, 1993) & different other measurements (Yoo & Donthu 2001, Pappu *et al.* 2005).

Broadly the Brand Equity measurement approaches can be classified into two types. The one approach is called as '*direct approach*' and other one as '*indirect approach*'. The direct approach as the name suggests is based on measuring Consumer Based Brand Equity directly from the evaluation of the consumer's preferences for a brand (Park & Srinivasan, 1994) or by measuring revenue premium occurred by a brand

(Ailawadi *et al.*, 2003) or by the overall utility provided by the brand (Kamakura & Russell, 1993), or by the overall value of the brand to a consumer (Rangaswamy *et al.*, 1993). On the other hand the indirect measure of Brand Equity measures the various different dimensions which contribute to the Brand Equity such as brand image, brand association & brand awareness (Yoo & Dontho, 2001, Vazquez, 2002, Pappu *et al.*, 2005).

Indirect approach for CBBE measurement: Mostly researchers have suggested the Aaker's (1991) and Keller's (1993) model of CBBE conceptualization as useful model for indirect approach for brand equity measurement. The studies of various researchers using indirect approach for measurement of consumer based brand equity are shown below in the table.

Author	Product category	Brand equity dimensions
Cobb Walgren <i>et al.</i> , 1995	House hold cleaner, Hotel,	Perceived quality, Brand awareness, Advertising awareness, Brand association,
Lassar <i>et al.</i> , 1995	Watches Television	Value, Social Image, Trustworthiness, Performance, Attachment,
Yoo and Donthu, 2001	Camera films, Athletic Shoes, Colored Televisions,	Brand association, Brand awareness, Brand loyalty, Perceived quality
Vazquez <i>et al.</i> , 2002	Sports shoes,	Product symbolic utility, Product functional utility, Brand symbolic utility, Brand functional utility,
Washburn and Plank, 2002	Paper Towels, Crisps,	Brand association, Brand awareness, Brand loyalty, Perceived quality,
De Chernatony, 2004	Financial services	Reputation, Satisfaction, Brand loyalty,
Netemeyer <i>et al.</i> , 2004	Jeans,	Perceived value,

Aadil Wani- A Comprehensive Review of Indirect Approaches for Consumer Based Brand Equity Measurement

	Colas, Toothpaste, Sports shoes	Perceived quality, Price premium,
Pappu <i>et al.</i> , 2005	Television, Cars,	Brand association, Brand awareness, Brand loyalty, Perceived quality,
Christodoulides <i>et al.</i> , 2006	Service, E-tailors,	Trust, Responsive service, Fulfillment, Online experience, Emotional connect
Rajaskar & Nalina, (2008)	Consumer durables	Social image, Performance, Trustworthiness, Value, Attachment
Buil <i>et al.</i> , (2008)	Cars, Sportswear, Soft drinks, Consumer electronics	Brand association, Brand awareness, Brand loyalty, Perceived quality,

Cobb Walgren *et al.*, 1995: They were the first ones to quantify the customer based brand equity on the basis of conceptualizations given by Keller in 1993 and Aaker in 1991. They suggested that market place behavior cannot be predicted accurately by the measure of attitudes so it tends to be a measure drawback in the direct approach used to measure customer based brand equity. They argue that the perceptions of consumer are better indicators of brand equity. They depicted a practical form of Aaker's brand equity model and its dimensions which include brand awareness, perceived quality and brand association to measure brand equity. They considered awareness composed of two components which are brand awareness and advertising awareness. They classified brand association into three categories which are positive associations, negative association and neutral associations. They arrived at a conclusion where they considered brand equity as a sum total of scores obtained for the four different brand dimensions. In their research they suggested that brand equity is the sum total of brand awareness perceived quality net

favorable associations and advertising awareness. This method helps us to measure the brand equity in terms of its individual components which in turn helps to figure out the variables resulting in lower brand equity. The measure disadvantage of using this method for brand equity evaluation is that we do not take any behavioral dimension into consideration.

Lassar *et al.*, 1995: defined brand equity as “the enhancement in the perceived utility and desirability a brand name confers on a product. It is the consumer’s perception of the overall superiority of a product carrying that brand name when compared to other products.” Their study suggests that there are many considerations taken into account in order to define brand equity. Their consideration refers to the perception of customers rather than the indicators which may be objective in nature. It focuses on the value brand name fetches globally to the brand and not only the characteristics of physical nature. They consider brand equity a relative entity while taking competitor market into consideration so the brand equity cannot be given an absolute value rather calculated in relation to competing brands. Finally they suggested that financial performance of a firm is positively influenced by brand equity. They started their study with Martin and Brown (1990) who termed brand equity as consumer perceived entity and suggested that brand equity to be composed of five components which are commitment, trustworthiness, image, perceived value and perceived quality. Lassar *et al.*, in 1995 enhanced the Martin and Brown conceptualization. They put more focus on performance component rather than quality component and regarded image component as an outcome of social factor. They defined image component as “The consumer’s perception of the esteem in which the consumer’s social group holds the brand. It includes the attribution a consumer makes and a consumer thinks that others make to the typical user of the brand.” They defined commitment of the consumer only on the basis of perceptual domain and defined it as “the relative strength of

consumer's positive feelings towards the brand." Finally their model for conceptualization of brand equity consists of five dimensions which include social image, performance, value, commitment, trustworthiness. They used Likert scale of seventeen items for data collection. The main disadvantage of the scale of their measurement is that it takes only perceptions into the account and does not shed any light on the behavioral component of the brand such as brand loyalty.

Yoo & Donthu, 2001: conceptualized brand equity as "Consumers different response between a focal brand and an unbranded product when both have the same level of marketing stimuli and product attributes." They suggested that the previous studies regarding the measurement of consumer based brand equity where not parsimonious enough to put to a use and these studies where guided without much of psychometric testing. They wanted to develop a generalized, reliable and more valid multidimensional model for measurement of consumer based brand equity. The two main entities as per their study, responsible for consumer based brand equity are the behavioral attributes and the cognitive attributes. They used a consumer based survey at an individual level. They started with the conceptualization of Aaker's 1991 model with four brand equity dimensions which are brand loyalty, brand awareness, perceived quality and brand associations. The main advantage in their measurement model was the introduction of brand loyalty as a behavioral attribute. They defined brand loyalty as " the tendency to be loyal to a focal brand which is demonstrated by the intention to buy." Whereas Aaker conceptualized brand loyalty as the attachment towards the brand shown by the consumer. They used the consumer survey method to collect the data from different cultural groups of Korea and America. Their scale for measurement of brand equity consisted of ten items based on three brand equity dimension i.e. brand loyalty, perceived quality and brand awareness. They combined brand awareness together with

brand association as the factor analysis did not produce significant values for these two entities to be measured as separate dimensions. The overall brand equity was measured by four item scale to test multidimensional brand equity scale for validity. The consumers attitude towards the brand and intentions of purchase where used to test the validity of the measures. A significant and strong correlation was demonstrated with all three measures. Yoo & Donthu's study is assumed to be one of the milestones in approaching brand equity evaluation based on indirect approach. The advantage of this measure is that it is more valid reliable and even culturally valid. The disadvantage of this measure of consumer base brand equity is that the brand awareness and brand association where converged into one dimension so they become inseparable from each other even if the basic model given by Aaker 1991 considers these two as very well distinct and separate dimension of consumer based brand equity.

Washburn & Palnk, 2002: they examined the scales developed by Yoo & Donthu (2001) on empirical basis for the psychometric properties. Altogether a total of fifteen items were tested for three dimension and four dimension solutions. Finally they came up with multidimensional model of brand equity, consisting of ten items. The overall brand equity was measured by a scale of four items. Their study tends to be more reliable and valid as it has empirical data to support its study. Their study is based on three dimensions of brand equity which are perceived quality, brand loyalty and brand association combined with brand awareness. Their study was an improvement over multidimensional brand equity model given by Yoo & Donthu, but they concluded that "Yoo & Donthu's scale is not psychometrically sound for theory testing research needs to be improved."

Vazquez et al., 2002: Their study was based on Kamakura & Russell's 1993 and Cobb-Walgren et al.'s model for measurement of brand equity through the consumers

perspective. They defined consumer based brand equity as, “The overall utility that a consumer associates with the use and consumption of the brand, including associations expressing both financial and symbolic utilities.” Their study focused on the distinction between the utility of the product and the utility of brand to a consumer. They argue that the product and a brand provide separate utilities to a consumer. On those lines they suggested two separate dimensions for evaluation. The first dimension accounts to the financial value of the product which is related to its physical utility. The second dimension consists of symbolic value which relates to psychosocial and social needs of consumer. Kamakura & Russel in 1993 related these two dimensions as product utility to the functional utility and the symbolic utility to the brand utility. The rational evaluation of the brand relates to functional value and the emotional aspect of the brand perceived by the consumer relates to the symbolic value. As suggested by Vazquez *et al.* (2002), the main goal of their study was to “construct a reliable and valid measurement instrument for consumer based brand equity that includes the brand name utilities and the product utilities and that also complies with the functional and symbolic content of each of these utilities.” They used four dimensions consisting of twenty two items to measure consumer based brand equity. These four dimensions are brand functional utility, product functional utility, brand symbolic utility and product symbolic utility. The main drawback of their research lies in the fact that they put stress only in ex-post utility and neglect the other factors. In an upcoming study done by Kocak *et al.* in 2002 it was revealed that Vazquez *et al.* (2002) model of study does not produce consistent results in different cultural domains. In their study Kokcak *et al.* used scale of twenty two items borrowed from Vazquea *et al.* (2002) to be administered to the consumers in Turkey and it was concluded that this scale was not good enough as it resulted in different results in different cultures.

Pappu et al., 2005: Their study was an enhancement over the consumer based brand equity model given by Yoo & Donthu in 2001. They argued that the basic advantage in the Yoo & Donthu's model is that they put a brand awareness and brand association as a single and combined into one dimension only even if the theoretical construct of the brand equity model defines them separately from each other. The basic motive of their study was to remove this weakness of Yoo & Donthu model. They argued that theoretically brand association and brand awareness are conceived as different from each other as suggested by Aaker in 1991 and Keller in 1993. There was enough of evidence supported by empirical data given by study of Sinha & Pappu in 1998 that suggested that these two dimensions are separate from each other. Finally Washburn & Plank (2002) suggested including more items into the Yoo & Donthu's scale of brand equity measurement. In the brand association dimension they included a sub dimension of brand personality. In their study they concluded that brand association and brand awareness are the two different dimensions distinct from each other to be used for brand equity measurement. So their study is based on following four dimensions, brand association, brand awareness, perceived quality, and brand loyalty. Here the brand loyalty is a behavioral attribute which was missing in many previous studies.

Rajasekar & Nalina, 2008: Their study is based on five dimensions model of brand equity. They adopted the model of consumer based brand equity given by Lassar et al. (1995) for measurement of brand equity of consumer durables. Their scale of measurement included seventeen items which were developed in order to represent five different dimensions. These dimensions are attachment, trustworthiness, social image, value and performance.

Proprietary methods of CBBE measurement: A lot of work has been done in an attempt for evaluation and

measurement of brand equity by the academic researchers. There has been a lot of research done by market research firms and brand consultancies to develop their own model for measurement of brand equity. The most commonly proprietary model for measurement of consumer based brand equity are Millward Brown's model of brand dynamics and Young & Rubicam's model of brand asset valuation for measurement of consumer based brand equity. This is shown in the table below:

Proprietary Method	Name of the firm	Dimensions of CBBE
Brand dynamics,	Milward Brown	Advantage, Bonding, Relevance, Performance
Brand asset valuator,	Young & Rubicam	Esteem, Energy, Knowledge, Relevance, Differentiation

CONCLUSION

The indirect approach focuses on the drivers of brand equity by studying its dimensions. The accumulation of measures of these dimensions for customer based brand equity is the basis of brand equity measurement. The indirect approaches of brand equity measurement not only measure the brand equity but explain the possible sources of the equity as this approach of brand equity measure reflects on drivers of brand equity independently. This makes the indirect measure more favourable tool for the brand equity evaluation for practitioners. Whenever a corrective action has to be taken to maintain or enhance the brand equity, the drivers of brand equity must be identified and acted upon. In that case we can use indirect measures as they do not take sources of the brand equity into the account. Thus indirect measures can be used to measure the overall brand equity and can be justified as a tool to control it.

REFERENCES:

1. Aaker, D. (1991). *Managing Brand Equity*. New York: Free Press.
2. Aaker, D. (1996). Measuring Brand Equity across Products and Markets. *California Management Review*, 38(3), 10-20.
3. Aaker, D. (1996). *Building Strong Brands*. New York: Free Press.
4. Aaker, D. (1991). Positioning Your Product. *Business Horizons*, 25 (May/June), 56-62.
5. Aaker, D., & Jacobson, L. (1994). Dimensions of brand personality. *Journal of Marketing Research*, 35(3), 347-356.
6. Agarwal, M.K., & Rao, V.R. (1996). An empirical comparison of consumer-based measures of brand equity. *Marketing Letters*, 7(3) 237-247.
7. Ailawadi, K.L., Lehmann, D.R. & Neslin, S.A. (2003). Revenue premium as an outcome measure of brand equity. *Journal of Marketing*, 67(4), 1-17.
8. Baker, C., Clive, N., & Julie, T. (2005). The Mind versus Market Share Guide to Brand Equity. *International Journal of Marketing Research*, 47(5), 25-42.
9. Bharadwaj, S.G., Vardarajan, P.R., & Fahy, J., (1993). Sustainable competitive advantage in service industries, a conceptual model and research propositions. *Journal of Marketing*, 57(4), 83-99.
10. Buil, I., de Chernatony, L. & Martinez, E. (2008). A Cross-National Validation of the Consumer-Based Brand Equity Scale. *Journal of Product and Brand Management*, 17(6), 384-392.
11. Christodoulides, G., de Chernatony, L., Furrer, O., & Abimbola, T. (2006). Conceptualizing and Measuring the Equity of Online Brands. *Journal of Marketing Management*, 22(7/8), 799-825.

12. Cobb-Walgren, C. J., Rubble, C. A., & Donthu, N. (1995). Brand equity, brand preference, and purchase intent. *Journal of Advertising*, 24(3), 25-40.
13. Dawar, N., & Pillutla, M. M. (2000). Impact of product-harm crisis on brand equity: the moderating role of consumer expectations. *Journal of Marketing Research*, 37(2), 215-226.
14. De Chernatony, L., Harris, F. J., & Christodoulides, G. (2004). Developing a Brand Performance Measure for Financial Services Brands. *Services Industries Journal*, 24(2), 15-33.
15. Dodds, W. B., Monroe, K. B., & Grewal, D. (1991). Effects of price, brand, and store information on buyers' product evaluations. *Journal of Marketing Research*, 28(3), 307-319.
16. Erdem, T., & Swait, J. (1998). Brand equity as a signaling phenomenon. *Journal of Consumer Psychology*, 7(2), 131-157.
17. Farquhar, P. H. (1989). Managing Brand Equity. *Marketing Research*, 1 (September), 24-33.
18. Feldwick, P. (1996). What is brand equity anyway, and how do you measure it. *Journal of the Market Research Society*, 38(2), 85-102.
19. Kamakura, W., & Russell, G. (1993). Measuring Brand Value with Scanner Data. *International Journal of Research in Marketing*, 10(1), 9-22.
20. Keller, K. L. (1993). Conceptualizing, Measuring and Managing Customer Based Brand Equity. *Journal of Marketing*, 57(1), 1-22.
21. Keller, K. L., & Lehmann, D. R. (2006). Brands and Branding: Research Findings and Future Priority. *Marketing Science*, 25(6), 740-59.
22. Kocak, A., Abimbola, T., & Ozer, A. (2002). Consumer Brand Equity in a Cross -Cultural Replication: an

- Evaluation of a Scale. *Journal of Marketing Management*, 23(1/2), 157-173.
23. Lassar, W., Mittal, B., & Sharma, A. (1995). Measuring Customer-Based Brand Equity. *Journal of Consumer Marketing*, 12(4), 11-19.
24. Leuthesser, L. (1988). Defining, Measuring and Managing Brand Equity. *Marketing Science Institute, Cambridge*, 88-104,
25. Leuthesser, L., Kohli, C., & Harich, K. (1995). Brand equity: The halo effect measure. *European Journal of Marketing*, 29(4), 57-66.
26. MacKay, M. M., Romanuik, J., & Sharp, B. (1997). A typology of brand equity research. *Proceedings of ANZMAC*, Monash University, Melbourne, 1146-1157.
27. Mahajan, V., Rao, V. R., & Srivastava, R. K. (1994). An approach to assess the importance of brand equity in acquisition decisions. *Journal of Product & Innovation Management*, 11, 221-235.
28. Martin, G., & Brown, T. (1990). In Search of Brand Equity: The Conceptualization and Measurement of the Brand Impression Construct. *Marketing Theory and Allocations*, American Marketing Association, Chicago, 2, 431-438.
29. Millward Brown Optimor (2010). BrandZ Methodology, www.millwardbrown.com.
30. Netemeyer, R., Krishnan, B., Pullig, C., Wang, G., Yagci, M., Dean, D., Ricks, J. & Wirth, F. (2004). Developing and Validating Measures of Facet of Customer-Based Brand Equity. *Journal of Business Research*, 57(1/2), 209-224.
31. Pappu, R., Quester, P.G., & Cooksey, R. (2005). Consumer-Based Brand Equity: Improving the Measurement – Empirical Evidence. *Journal of Product and Brand Management*, 14(3), 143-154

32. Park, C. S., & Srinivasan, V. (1994). A Survey-Based Method for Measuring and Understanding Brand Equity and Its Extendibility. *Journal of Marketing Research*, 31(5), 271-88.
33. Rajasekar, N., & Nalina, K. G. (2008). Measuring Customer-Based Brand Equity in Durable Goods Industry. *Journal of Marketing and Communication*, 4(1), 48-58.
34. Rangaswamy, A., Burke, R.R. & Oliva, T.A. (1993). Brand equity and the extendibility of brand names, *International Journal of Research in Marketing*, 10(1), 61-75.
35. Shocker, A. D., & Weitz, B. (1988). A perspective on brand equity principles and issues. *Defining, Measuring and Managing Brand Equity Report: A conference summary*, Marketing Science Institute, 2(4), 88-104.
36. Simon, C. J., & Sullivan, M. W. (1993). The Measurements and Determinants of Brand Equity: A Financial Approach. *Marketing Science*, 12(1), 28-52.
37. Sinha, A., & Pappu, R. (1998). Parceling of the sub components of consumer-based brand equity using factorial survey: an empirical investigation in the New Zealand consumer electronics sector. *Proceedings of ANZMAC*, University of Otago, Dunedin, 2433-2438.
38. Srinivasan, V., Park, C. S., & Chang, D. R. (2001). EQUITYMAP: Measurement, Analysis and Prediction of Brand Equity and its Sources. *Research Paper Series, Graduate School of Business*, Stanford University.
39. Srivastava, R. K., & Shocker, A. (1991). Brand Equity: A Perspective on Its Meaning and Measurement, Report Number 91-124. *Marketing Science Institute*, Cambridge, MA.
40. Swait, J., Erdem, T., Louvière, J., & Dubelaar, C. (1993). The equalization price: a measure of consumer-perceived

- brand equity. *International Journal of Research in Marketing*, 10(1), 23–45.
41. Vazquez, R., Rio, D., & Iglesias, V. (2002). Consumer-Based Brand Equity: Development and validation of a Measurement Instrument. *Journal of Marketing Management*, 18(1/ 2), 27-48.
 42. Washburn, H. J., & Plank, R. E. (2002). Measuring brand equity: An evaluation of a consumer-based brand equity scale. *Journal of Marketing Theory and Practice*, 10(1), 46-61.
 43. Yoo, B., & Donthu, N. (2001). Developing and Validating a Multidimensional Consumer-Based Brand Equity Scale. *Journal of Business Research*, 52, 1-14.